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10/606,750	06/27/2003	Naohiro Toda	239522US0	7361
22850	7590	04/12/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			DOTE, JANIS L	
			ART UNIT	PAPER NUMBER
			1756	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		04/12/2007	ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/12/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	Application No. 10/606,750	Applicant(s) TODA ET AL.	
	Examiner Janis L. Dote	Art Unit 1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,7-26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,7-23 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1,7-26 and 28 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/13/07; 4/6/07</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. This office action is responsive to the response filed on Jan. 29, 2007. Claims 1, 7-26, and 28 are pending.

2. Claims 24-26 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicants timely traversed the restriction (election) requirement in the reply filed on Nov. 23, 2005.

Applicants are reminded that if the product claims are found to be allowable, pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), process claims 24-26, which do not depend from or otherwise include all the limitations of the allowable product, will NOT be rejoined.

3. The examiner has considered the US applications listed in the "List of related cases" filed in the Information Disclosure Statements (IDS) on Feb. 13, 2007, and on Apr. 6, 2007.

4. The instant specification at page 12, lines 14-21, discloses that the term "surface roughness" recited in the instant claims "means the ten point mean roughness which can be measured by a method based on JIS B0601. Specifically, the

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roughness is represented by the difference between the average height of the five projected portions and the average depth of the five recessed portions in a unit length."

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 7-23, and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(1) Instant claims 1 and 28 recite that the titanyl phthalocyanine X-ray diffraction spectrum has "a peak . . . at an angle of  $23.5^{\circ} \pm 0.2^{\circ}$ ."

The originally filed specification does not provide an adequate written description of such a peak at an angle of  $23.5^{\circ} \pm 0.2^{\circ}$ . The originally filed specification at page 6,

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lines 11-20, describes a titanyl phthalocyanine having an X-ray diffraction spectrum having a maximum peak at a Bragg ( $2\theta$ ) angle of  $27.2^\circ \pm 0.2^\circ$ , "a lowest peak at an angle of  $7.3^\circ \pm 0.2^\circ$ , and no peak at an angle from  $7.4^\circ$  to  $9.4^\circ$  (i.e., an interval between the lowest angle peak to a next peak at a high angle side is not less than  $2.0^\circ$ )," and no peak at an angle of  $26.3^\circ$ . In synthesis example 1, the originally filed specification discloses that the resultant titanyl phthalocyanine has an X-ray diffraction spectrum having a maximum peak at a Bragg ( $2\theta$ ) angle of  $27.2^\circ \pm 0.2^\circ$  and a lowest peak at an angle of  $7.3^\circ \pm 0.2^\circ$ . The originally filed specification states that no peaks are observed at angles "from  $7.4^\circ$  to  $9.4^\circ$  (i.e., the interval between the lowest angle peak to a next peak at a high angle side is  $2.0^\circ$  or more)" and no peak is observed at an angle of  $26.3^\circ$ . See the originally filed specification at page 66, lines 5-14, and Fig. 13. Table 1 at page 71 of the originally specification reports that the X-ray diffraction spectrum of the titanyl phthalocyanine in synthesis example 1 has a maximum peak at a Bragg ( $2\theta$ ) angle of  $27.2^\circ$ , a lowest peak at an angle of  $7.3^\circ$ , a peak at an angle of  $9.4^\circ$ , a peak at an angle of  $9.6^\circ$ , no "peak in a range of  $7.4^\circ$  to  $9.6^\circ$ ," and no peak at an angle of  $26.3^\circ$ . The originally filed specification does not appear to provide any description of a titanyl phthalocyanine X-ray diffraction

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spectrum having a peak at an angle of  $23.5^{\circ} \pm 0.2^{\circ}$  as recited in instant claims 1 and 28.

(2) Instant claims 1 and 28 also recite that the titanyl phthalocyanine X-ray diffraction spectrum has "a peak at an angle of  $9.5^{\circ}$  and a peak at an angle of  $9.7^{\circ}$ ."

The originally filed specification does not provide an adequate written description of such peaks at a Bragg angle of  $9.5^{\circ}$  and at a Bragg angle of  $9.7^{\circ}$ . As discussed in item (1) above, in synthesis example 1, the originally filed specification discloses that the resultant titanyl phthalocyanine has an X-ray diffraction spectrum having a maximum peak at a Bragg ( $2\theta$ ) angle of  $27.2^{\circ} \pm 0.2^{\circ}$  and a lowest peak at an angle of  $7.3^{\circ} \pm 0.2^{\circ}$ . The originally filed specification states that no peaks are observed at angles from " $7.4^{\circ}$  to  $9.4^{\circ}$  (i.e., the interval between the lowest angle peak to a next peak at a high angle side is  $2.0^{\circ}$  or more)" and no peak is observed at an angle of  $26.3^{\circ}$ . See the originally filed specification at page 66, lines 5-14, and Fig. 13. Table 1 at page 71 of the originally specification reports that the X-ray diffraction spectrum of the titanyl phthalocyanine in synthesis example 1 has a maximum peak at a Bragg ( $2\theta$ ) angle of  $27.2^{\circ}$ , a lowest peak at an angle of  $7.3^{\circ}$ , a peak at an angle of  $9.4^{\circ}$ , a peak at an angle of  $9.6^{\circ}$ , no "peak in a range of  $7.4^{\circ}$  to  $9.6^{\circ}$ ,"

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and no peak at an angle of  $26.3^{\circ}$ . The originally filed specification does not appear to provide any description of a titanyl phthalocyanine X-ray diffraction spectrum having a peak at an angle of  $9.5^{\circ}$  or a peak at an angle of  $9.7^{\circ}$  as recited in instant claims 1 and 28.

Applicants' arguments filed on Jan. 29, 2007, have been fully considered but they are not persuasive.

(1) Applicants assert that the Rule 132 declaration, which was executed by Tatsuya Niimi on Jan. 29, 2007, filed on Jan. 29, 2007, shows that raw data of the X-ray diffraction spectrum illustrated in Fig. 13 of the present invention clearly supports a peak (i.e., peak No. 18) at a Bragg angle of  $23.5 \pm 0.2^{\circ}$ .

Applicants' assertion is not persuasive. The showing in the Rule 132 declaration is not part of the originally filed specification. Applicants have not indicated where in the originally filed specification, by page and line number, there is an adequate general description of the peak at a Bragg angle of  $23.5 \pm 0.2^{\circ}$ . Furthermore, for the reasons discussed in item (2), infra, the disclosure in the originally filed specification also appears to contradict the raw data shown in the declaration. Moreover, the instant claims do not limit the titanyl phthalocyanine (TiOPc) recited in the instant claims as



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that having the X-ray diffraction pattern of Fig. 13. Rather, instant claims 1 and 28 merely require that the titanyl phthalocyanine have an X-ray diffraction spectrum having particular peaks. The originally filed specification at page 73, lines 5-8, discloses that the titanyl phthalocyanine in synthesis example 8 "had the same [X-ray diffraction] spectrum as that of the TiOPc obtained in Synthesis 1." However, the X-ray diffraction pattern shown in Fig. 14 of the TiOPc in synthesis no. 8 is not the same as that show in Fig. 13 of the TiOPc in synthesis No. 1. The spectrum in Fig. 14 also does not appear to have a "peak" at a Bragg angle of  $23.5 \pm 0.2^\circ$ . Thus, based on the evidence in the originally filed specification, the originally filed specification does not provide an adequate written description of the TiOPc having the broadly recited X-ray diffraction spectrum having a peak at a Bragg angle of  $23.5 \pm 0.2^\circ$  in instant claims 1 and 28.

Furthermore, applicants' arguments that the X-ray diffraction spectrum of the Nukada (not "Nukuda" as cited by applicants) titanyl phthalocyanine is different from that of the present invention because different synthesizing methods were used are not persuasive. First, the instant claims do not limit the titanyl phthalocyanine as having the X-ray diffraction pattern in Fig. 13. Rather, instant claims 1 and 28 merely



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recite that the titanyl phthalocyanine has a X-ray diffraction spectrum having particular peaks. Second, the instant claims are drawn to a photoreceptor, not to a method of making a titanyl phthalocyanine. Third, Nukada was only cited to rebut applicants' arguments that the originally filed specification and "Figures" supported the peak at a Bragg angle of  $23.5 \pm 0.2^\circ$ . As noted in the office action mailed on Oct. 30, 2006, applicants' comments in the responses filed on Aug. 25, 2006, page 16, lines 7-9, conflict with the statement in the Rule 132 declaration filed on Sep. 26, 2006, regarding the X-ray diffraction spectrum shown in Fig. 4 of Nukada. It was not clear what applicants consider as a "peak" in a X-ray diffraction pattern. (In the response filed on Aug. 25, 2006, page 16, lines 7-9, applicants asserted that the "spectrum of Fig. 4 [of Nukada] has no  $23.5^\circ$  peak . . . Namely, a projection observed [in Fig.4] at an angle slightly lower than  $23.5^\circ$  is not a peak" (emphasis in the original); while the Rule 132 declaration filed on Sep. 26, 2006, states that "there is no Bragg angle X-ray diffraction peak in expanded Figure 4 [of the Nukada titanyl phthalocyanine] at an angle of  $23.5^\circ \pm 0.2^\circ$ ." In the response filed on Jan. 29, 2007, page 5, lines 8-10, applicants state that "a peak may be present at an angle lower than  $23.5^\circ$  in FIG. 4 [of Nukada]. Even if this was a peak, the

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peak is not present at  $23.5^{\circ}$  and therefore the peak is not the  $23.5^{\circ}$  peak." However, applicants' statement filed on Jan. 29, 2007, does not remove that confusion.

(2) Applicants assert that peaks at Bragg angles  $9.5^{\circ}$  and  $9.7^{\circ}$  are supported by the raw data of Fig. 13, as shown in the Rule 132 declaration filed on Jan. 29, 2007, peaks Nos. 2 and 3.

Applicants' assertion is not persuasive. The showing in the Rule 132 declaration is not part of the originally filed specification. Applicants have not indicated where in the originally filed specification, by page and line number, there is an adequate general description of the peaks at those Bragg angles. Moreover, the disclosure in the originally filed specification appears to contradict the raw data shown in the declaration. As noted in the rejection in item (2), the originally filed specification in Table 1 at page 71 discloses that the X-ray diffraction spectrum in Fig. 13 exhibits peaks at angles of  $9.4^{\circ}$  and  $9.6^{\circ}$ . Table 1 also reports that "no" peak is observed in a range of  $7.4$  to  $9.6^{\circ}$ . The raw data for Fig. 13 in the declaration does not list peaks at angles of  $9.4^{\circ}$  and  $9.6^{\circ}$ . Rather, the raw data lists peaks at angles of  $9.460^{\circ}$  and  $9.680^{\circ}$ , or as asserted by applicants, at  $9.5^{\circ}$  and  $9.7^{\circ}$ . In addition, as discussed in item (1) above, the instant claims do not limit the titanyl phthalocyanine as that having the X-ray diffraction

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pattern of Fig. 13. Furthermore, although the originally filed specification states that the TiOPc of synthesis of example 8 has the same X-ray diffraction spectrum as that in synthesis example 1, the spectrum in Fig. 14 of the TiOPc of synthesis 8 is not the same as that shown in Fig. 13. The spectrum in Fig. 14 also does not appear to have "peaks" at Bragg angles of  $9.5^\circ$  and  $9.7^\circ$ . Thus, based on the evidence in the originally filed specification, the originally filed specification does not provide an adequate written description of the TiOPc having the broadly recited X-ray diffraction spectrum having peaks at Bragg angles of  $9.5$  and  $9.7 \pm 0.2^\circ$  in instant claims 1 and 28.

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1, 7, 8, 10-14, 16-20, 22, 23, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0076633 A1 (Niimi'633), as evidenced by applicants' admission at page 87, lines 22-23, of the instant specification (applicants' admission I) and by the ACS File Registry RN 26201-32-1, combined with: (1) US 5,776,650 (Hashimoto); and (2) US 6,623,899 B2 (Takaya).

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The claims are rejected for the reasons discussed in the office action mailed on Oct. 30, 2006, paragraph 10, which are incorporated herein by reference.

9. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niimi'633, as evidenced by applicants' admission I and by the ACS File Registry RN 26201-32-1, combined with: (1) Hashimoto; and (2) Takaya, as applied to claim 20 above, further combined with US 2002/0051654 A1 (Niimi'654).

The claims are rejected for the reasons discussed in the office action mailed on Oct. 30, 2006, paragraph 11, which are incorporated herein by reference.

10. Claims 1, 7, 8, 10, 14, 15, 17, 19, 23, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,399,262 B1 (Oshiba) combined with Japanese Patent 2000-319538 (JP'358), as evidenced by Ladd et al., Structure Determination by X-ray Diffraction, p. 426 (Ladd). See the Japanese Patent Office (JPO) machine-assisted translation of JP'358 for cites.

The claims are rejected for the reasons discussed in the office action mailed on Oct. 30, 2006, paragraph 12, which are incorporated herein by reference.

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11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oshiba combined with (1) JP'538, as evidenced by Ladd, and (2) Hashimoto, as applied to claim 1 above, further combined with further with US 5,496,671 (Tamura).

The claim is rejected for the reasons discussed in the office action mailed on Oct. 30, 2006, paragraph 13, which are incorporated herein by reference.

12. Applicants' arguments filed on Jan. 29, 2007, as applicable to the rejections set forth in paragraphs 8-11 above, have been fully considered but they are not persuasive.

Applicants assert that none of the references discloses or suggests the instantly claimed photoreceptor for applicants' various reasons.

Applicants' assertion is not persuasive. The reasons for combining the references do not have to be those of applicants. As discussed in paragraph 8 above, the photoreceptor exemplified in example 6 of Niimi'633 comprises a charge transport layer made with the halogen-free solvent tetrahydrofuran. As discussed in paragraph 10 above, Oshiba teaches that its charge transport layer can be made using methyl ethyl ketone, which is a non-halogen solvent. For the reasons discussed in the rejections in paragraphs 8 and 10 above, Hashimoto provides

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reason, suggestion, and motivation to make and use a charge generation layer coating solution comprising the titanyl phthalocyanine pigment taught by either Niimi'633 or JP'538, as taught by Hashimoto, such that the resultant pigment dispersoids have an average particle size of about 0.1 to 0.3  $\mu\text{m}$ , such as 0.15 or 0.18  $\mu\text{m}$ . Takaya provides reason, suggestion, and motivation to use the intermediate layer as the intermediate layer in the photoreceptor rendered obvious over the combined teachings of Niimi'633 and Hashimoto. Furthermore, the combined teachings of Niimi'633, Hashimoto, and Takaya and the combined teachings of Oshiba, JP'358, and Hashimoto both render obvious photoreceptors that meet the compositional, particle size, and surface roughness limitations recited in the instant claims.

Accordingly, the rejections set forth in paragraphs 8-11 stand.

Applicants do not assert that the instantly claimed photoreceptors provide "unexpected" results over the prior art photoreceptors. Rather applicants assert that the references do not disclose the "superior properties of the claimed photoreceptors" shown in the examples of the present invention.

However, as discussed supra, the reasons for combining the references do not have to be those of applicants. Furthermore, the showing in the instant specification is insufficient to show

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that the instantly claimed invention yields unexpectedly "superior" results. Reference examples 1 and 2 exemplify photoreceptors comprising charge transport layers made from a halogenated solvent. Those photoreceptors exhibit the same or similar results in image quality and potential properties, i.e., photosensitivity, as exhibited by the photoreceptors in examples 1 to 7, which comprise charge transport layers made by the non-halogenated solvents, tetrahydrofuran or dioxolan. See Table 2 of the instant specification. Moreover, as discussed supra, Niimi'633 exemplifies a charge transport layer made with the non-halogenated solvent tetrahydrofuran. With respect to the rejections over Oshiba, the non-halogenated solvents exemplified in examples 1-7 are preferred. See instant claim 16. Thus, the showing in the instant specification does not show that the full scope of instant claims 1 and 28 provides the results exhibited by examples 1-7 shown in Table 2.

Furthermore, regarding applicants' comments regarding the showing in example 2 compared to the showings in examples 8 to 13, instant claims 1 and 28 do not require that the TiOPc have no peaks in an angle range of from  $7.4^{\circ}$  to  $9.4^{\circ}$ . Rather instant claims 1 and 28 require that the TiOPc have a peak at a lowest angle at  $7.3^{\circ} \pm 0.2^{\circ}$  wherein "an interval between the lowest angle peak to a next peak at a high angle side is not



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less than  $2.0^{\circ}$ ." Thus, the instant claims encompass X-ray diffraction spectra having no peaks in the range of  $7.6^{\circ}$  to  $9.5^{\circ}$  or of  $7.2^{\circ}$  to  $9.1^{\circ}$ . Applicants cannot argue patentability based on limitations that are not present in the instant claims. In addition, for the reasons discussed in paragraph 6 above, it is not clear whether the TiOPc's made in synthesis 1 or in synthesis 8 used in examples 2, 14, and 15 are commensurate in scope with the TiOPc recited in instant claims 1 and 28. In particular, it is not clear whether those TiOPc's have the X-ray diffraction spectrum recited in instant claims 1 and 28.

Moreover, the instant specification does not appear to provide a probative comparison to either Niimi'633 or to Oshiba. Niimi'633 exemplifies a photoreceptor that exhibits stable charging properties, i.e., residual potential properties, and that provides images with "good" image qualities. See Niimi'633, Table 2 at page 28, example 6. Oshiba exemplifies a photoreceptor that provides 50,000 copies with no background staining and an image density of at least 1.2 in the solid black areas. See Oshiba, col. 43, lines 44-56, example 26. None of the comparative examples appear to exemplify the photoreceptors disclosed by the prior art.

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Accordingly, for the reasons discussed above and in the rejections in paragraphs 8-11 above, the prior art rejections stand.

13. Claims 1, 7-23, and 28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10, 12-18, and 20-27 of copending Application No. 10/804,067 (Application'067), as evidenced by that portion of the disclosure in Application'067 that supports the claimed subject matter in claims 1-18 and 20-27 of Application'067, and the ACS File Registry RN 26201-32-1.

The claims are rejected for the reasons discussed in the office action mailed on Oct. 30, 2006, paragraph 15, which are incorporated herein by reference.

14. Claims 1, 8-10, 15-18, 20-23, and 28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/656,280 (Application'280), as evidenced by that portion of the disclosure in Application'280 that supports the claimed subject matter in claims 1-18 of

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Application'280, and the ACS File Registry RN 26201-32-1, in view of Takaya and US 4,734,348 (Suzuki).

The claims are rejected for the reasons discussed in the office action mailed on Oct. 30, 2006, paragraph 16, which are incorporated herein by reference.

15. In the response filed on Jan. 29, 2007, applicants did not traverse the rejections over the copending applications set forth in paragraphs 13 and 14 above. Accordingly, the rejections stand.

16. **THIS ACTION IS MADE FINAL.** Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Claudia Sullivan, whose telephone number is (571) 272-1052.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLD  
Apr. 6, 2007

*Janis L. Dote*  
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**PRIMARY EXAMINER**  
**GROUP 1500**  
1700